ETAAC's "Big Ideas" – Consolidated, Version 1
August 14, 2007

1. Funding for innovation
    a. Incubation efforts to spur innovation and commercialization (Energy sector)
    b. Partnership for New Generation of Energy Technologies in CA (Weyant)
    c. CA advanced energy technology demonstration fund (Weyant)
    d. "CalCEF +" (Weyant)
    e. Develop a California Carbon Trust ala UK's Carbon Trust: non-profit set up by gov't to support low-carbon technologies (Farrell)
    f. Technology certification: certify carbon reduction potential of new technologies (Hawley)
    g. Revolving fund for technology demonstration projects (Rothrock)
    h. Reorganize and recalibrate current subsidy programs to measure and incent GHG reductions (Bicker)
    i. Support first MW installations that prove technical feasibility and enable project financing for emerging technologies (Bicker)
    j. Create a statewide nonprofit organization to support innovation and incubation efforts (Bicker)

2. Consumer participation
    a. Green fuels labeling (Farrell)
    b. Green biofuels index for biomass (Tuttle)
    c. California-grown program for wood products (Tuttle)
    d. California Carbon Star certification (Epstein)
    e. Carbon accounting for commercial and consumer purchasing and decision-making (Kammen)
    f. Energy Savings Accounts to support low-greenhouse gas investments (Kammen)

3. Energy efficiency
    a. Improve policies to support Combined Heat and Power (Rothrock)
    b. Educate small businesses about benefits of LED (Energy sector)
    c. Fertilizer use and efficiency (Cory)
    d. State online directory of green building technology and service providers (Rothrock)
    e. On-bill financing for energy efficiency projects (Rothrock)
    f. Create and encourage "Do It Green" industry collaboratives (like "Build it Green.") (Farrell)
    g. Collection of climate data and development of software for climate-smart building design (Rothrock)
    h. Software for energy investments (Weyant)
    i. Incentives and technical assistance for tenants and building owners to retrofit leased space for energy efficiency (Rothrock)
    j. Green building fast-track permitting and training for building officials (Rothrock)
    k. Expand energy efficiency credit beyond three-year timeframe (Energy sector)

4. Financial structures
    a. Feed-in tariffs for renewable energy (Kammen)
    b. Auction GHG allowances or tax GHG emissions (Farrell)
    c. Price floor for carbon (Energy Sector)
    d. California Carbon Trust to fund "Carbon Moyer" style programs (Epstein)
    e. Market CA carbon credits out of state as revenue source (Farrell)
    f. Municipal Assessment Districts to reduce end-user up-front costs (Kammen)
    g. Incentives and rebates to lower costs to municipalities for switching to LEDs (Energy sector)
    h. Provide utilities with rate-based reimbursement for all R&D expenditures on emerging CO2 technologies (Energy sector)
    i. California Clean Tech manufacturing incentive, including provision for worker training (Hawley)
    j. Small business "greentech" tax incentives (Rothrock)
    k. Extend the production tax credit and investment tax credit (Energy sector)
    l. Rebates for load reduction using non-generation technologies (Rothrock)
    m. Prize competition (like CalSTEP proposal) as incentive to develop advanced biofuels (Hawley)
    n. Incentives for rollout of alternative fueling infrastructure (Hawley)
    o. Advanced biofuels incentives, including per-gallon incentives and revenue neutral "feebate" (Hawley)
    p. "Fee-bate" to benefit purchasers of PHEVs funded by highly polluting automobile sales (Energy sector)
    q. Sell credits generated by sale of electricity as fuel to petroleum distributors; funds distributed to EV customers or utilities (Energy sector)
    r. Counter trend towards forest conversion by bundling carbon value with other incentive programs to keep landowners on the land (Tuttle)
    s. Account for carbon "embedded" in water in planning processes or directly via pricing (Kammen)

5. Renewables
    a. Expand RPS to Environmental Portfolio Standard (Energy sector)
    b. Link biomass objectives with wildfire risk management (Tuttle)
    c. Biomass and biofuels (Cory)
    d. Dairy digesters (Cory)
    e. Lignocellulosic technologies (plant residues, dedicated energy crops and waste materials) (BP)
    f. Energy parks (Epstein)
    g. Siting of energy parks should consider biomass availability (Tuttle)
    h. Simplify permitting process for renewable energy generation projects (Energy sector)
    i. Improve transmission for renewable energy (Energy sector)
    j. Continued scale-up of solar power deployment on new and existing homes, businesses and state structures (BP)
    k. Green grid /community power (BP)

l. Information sharing for smartening the energy grid (Energy sector)
m. Investigate needed upgrades to distribution infrastructure due to DG and PHEV penetration, and accelerate ratemaking (Energy sector)
n. Support "capture-ready" requirements for all new generation facilities (Energy sector)
o. Change gasification law to support waste diversion (Energy sector)
p. Waste conversion permitting and siting (Rothrock)
q. Begin to Develop a *Sustainable Fuel Standard* (Kammen)

6. Energy storage
    a. Roll back warranty requirements on batteries for PHEVs/EVs (Energy sector)
    b. Large-scale pumped hydroelectric storage facilities (Energy sector)
    c. Task force for vehicle batteries (Energy sector)
    d. Utilities commit to purchase electricity storage capacity on annual basis (Energy sector)

7. Carbon storage
    a. Air capture of CO2 (assumes CO2 storage available) (Farrell)
    b. CCS (Energy sector)
    c. CCS (Cory)
    d. CCS for natural gas and biomass (Epstein)
    e. Reforestation and riparian habitat (Cory)
    f. CCS Deployment strategy (BP)
    g. More funding to LLNL and UC research projects on CCS (Energy sector)
    h. Insurance/liability risk for CCS (Energy sector)
    i. Use of algae to make biofuels as carbon storage strategy (Energy sector)

8. Other
    a. Shift freight shipments to electric rail (Farrell)
    b. Policy collaborative, like CalFED (Farrell)
    c. Smart growth: Link state infrastructure spending to regional smart growth plans (Hawley)
    d. Broad state participation to achieve GHG emission reduction goals: State agencies commit to reduce GHGs and report every 6 months (Rothrock)
    e. Industry/government partnership to improve industrial energy intensity (Rothrock)
    f. Adopt established forest carbon metrics and accounting principles (Tuttle)